BUILDING STANDARDS COMMISSION
2525 Natomas Park Drive, Suite 130
Sacramento, California 95833-2936
(916) 263-0916 FAX (916) 263-0959

March 2, 2011

Robert Scott, Fire Marshal
Fire Department
City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024-3633

Dear Mr. Scott:

This letter is to acknowledge receipt on January 10, 2011 of the City of Encinitas submittal pertaining to Ordinance No. 2010-19 with findings and is acceptable for filing. Your filing attests to your understanding that according to Health and Safety Code Section 17958.7 no modification or change to the California Building Standards Code shall become effective or operative for any purpose until the finding and the modification or change have been filed with the California Building Standards Commission (the Commission).

This letter attests only to the filing of these local modifications with the Commission, which is not authorized by law to determine the merit of the filing.

As a reminder, local modifications are specific to a particular edition of the Code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the Code is published. In addition, should you receive Fire Protection District ordinances for ratification, it is required to submit the ratified ordinances to the Department of Housing and Community Development [H&SC Section 13869.7(c)], attention State Housing Law Program Manager, rather than the Commission.

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

City of Encinitas
Fire Prevention Bureau
505 S. Vulcan Avenue, Encinitas, California 92024-3633

January 10, 2011

California Building Standards Commission
2525 Natomas Park Drive, Suite 130
Sacramento, CA. 95833

Subject: Code Amendments for the City of Encinitas

To Whom It May Concern,

Enclosed are copies of Ordinances and Amendments to the California Fire Code, shown as Ordinance 2010-19. These amendments, additions or deletions include all sections of the fire code.

If you have any questions or concerns, please contact me at your earliest convenience.

Sincerely,

Robert Scott
Fire Marshal
Encinitas Fire Department
760-633-2822-office
760-331-7907-cell
760-633-2818-fax
rscott@ci.encinitas.ca.us

Section 1

That a certain document, three (3) copies of which are on file in the office of the City of Encinitas Fire Department being marked and designated as the 2010 California Fire Code, including Appendix Chapters; Appendix Chapter 4, Appendix B, H as published by the International Code Council, be and is hereby adopted as the Fire Code of the City of Encinitas, in the State of California regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises erection, construction, enlargement, alteration, repair, moving, removal, conversion, demolition, equipment use, and maintenance of buildings and structures, including that providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Fire Code on file in the office of the City of Encinitas Fire Department are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this ordinance.

Chapter 2 Definitions – Section 202 is hereby amended in the Building/Fire Code portion of the California Building Standards Commission to read as follows:

Fire Hazard is any thing that increases or could create a hazard or menace of fire to a greater degree than customarily recognized as normal by persons in the public service regularly engaged in preventing, suppressing or extinguishing fire or any thing or act which could obstruct, delay, hinder or interfere with the operations of the fire department or egress of occupants in the event of fire.

Fireworks - is any combustible or explosive composition, or any substance or combination of substances, or device prepared for the purpose of producing a visible or an audible effect by combustion, explosion, deflagration or detonation, and shall include blank cartridges, toy pistols, toy cannons, toy canes, or toy guns in which explosives are used, firecrackers, torpedoes, sky-rockets, roman candles, Daygo bombs, sparklers, snap caps, poppers or other devices of like construction and any devices containing any explosive or flammable compound, or any tablet or other device containing any explosive substance, except that the term "fireworks" shall not include any auto flares, paper caps containing not in excess of an average of twenty-five hundredths of a grain of explosive content per cap and toy pistols, toy canes, toy guns or other devices for use of such caps, the sale and use of which shall be permitted at all times. "Fireworks" shall include snap caps and poppers, regardless of the amount of explosive content included in each device.

Hazardous Fire Area - Any geographic area mapped by the State or local jurisdiction as a ~~high, or~~ very high fire hazard area, or as set forth by the FAHJ that contains the type and condition of vegetation, topography, weather, and structure density to potentially increase the possibility of vegetation conflagration fires shall be considered a hazardous fire area.

Nothing in this section shall imply or allow a building height in excess of current City of Encinitas planning and zoning requirements.

Travel Time. The estimated travel time it would take for a responding agency to travel from the fire station to the furthest structure in a proposed development project, determined by measuring the safest, most direct, appropriate and reliable route with consideration given to safe operating speeds for heavy fire apparatus.

"Response Time" is the elapsed time from the fire department's receipt of the first alarm to when the first fire unit arrives at the scene.

Whenever the terms "This Code" and " 2010 International Fire Code" are used they shall mean the ~~2007~~ 2010 California Fire Code as modified by the City of Encinitas with the deletions, revisions and additions set forth in the amendments.

Section 319 is added to the California Fire Code to read:

Section 319
Mid-Rise Buildings

Section 319.1 General. All newly constructed mid-rise buildings or any midrise building which undergoes a complete renovation that requires the complete vacancy of the building to complete the renovation shall require the installation of fire sprinklers throughout the building and a class I standpipe system, with 2-1/2 inch hose outlets in each stair enclosure and on each floor level. The fire department connection serving the fire sprinkler system and standpipe system shall be interconnected.

Section 319.1.2 Elevators. At least one elevator cab shall be assigned for fire department use, which shall serve all floors of the building.

Section 503.1.2 Additional Access

The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

The Chief may require one or more secondary means of access to a project: development or area where he deems that such access is necessary for emergency operations and/or evacuation. The maximum length of a dead-end road, including all dead-end roads accessed from that dead-end road, shall not exceed the following cumulative lengths, regardless of the number of parcels served:

Parcels zoned for less than 1 acre	800 feet
Parcels zoned for 1 acre to 4.99 acres	1,320 feet
Parcels zoned for 5 acres to 19.99 acres	2,640 feet
Parcels zoned for 20 acres or larger	5,280 feet

These requirements may be modified when in the opinion of the Chief conditions warrant. All lengths shall be measured from the edge of the roadway sizes, requiring different length limits, the shortest allowable length shall apply.

Section 503.2.1 Dimensions Fire apparatus access roads shall have an unobstructed improved width of not less than 24 feet, except for single-family residential driveways; serving no more than ~~f~~ two single-family dwellings, shall have a minimum of 16 feet of unobstructed improved width.

1. Fire access roadways, gated entrances with card readers, guard stations or center medians, which have separated lanes of one-way traffic, shall be not less than ~~12~~ 14 feet wide per lane.

Section 503.2.1.1 Road Phasing Policy- Single Family Dwellings The fire access roadway requirement for widening existing improved fire apparatus roadway shall be per TABLE 503.2.1.1A – PHASING POLICY - Fire Apparatus Access and will extend from the property out to the nearest public road.

TABLE 503.2.1.1A - PHASING POLICY
Fire Apparatus Access – Single Family Dwellings

Number of Parcels	Unobstructed Road width	Roadways Over 600 foot Long	Extend to Nearest Public Road
1-2	16-foot, paved	Turnouts every 400-feet	Yes
3-8	20-foot, paved	Turn-outs every 400-feet	Yes
9 or more	24-foot, paved	Not required	Yes

~~3.~~2. Existing legal lots that have easement access roadways less than ~~16~~ 20 feet wide that provide primary access to other lots shall record a covenant granting easement rights for emergency vehicle ingress and egress purposes and shall relinquish rights to build any building, wall, fence or other structure within 5 feet of the existing access easement.

Section 503.2.3 Surface Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus not less than 75,000 lbs. and shall be provided with an approved paved surface to provide all-weather driving capabilities.

Section 503.2.7 Grade: Grades exceeding 15.0% (incline or decline) on fire apparatus access roads shall not be permitted without mitigation. Minimal mitigation shall be a surface of Portland cement concrete (PCC), with a deep broom finish perpendicular to the entire direction of travel, or equivalent, to enhance traction the entire length of the grade. The Chief may require additional mitigation measures where he deems appropriate. The angle of departure and angle of approach of a fire access roadway shall not exceed seven degrees (12 percent) or as approved by the Chief.

Section 503.2.8 Roadway Turnouts: turnouts shall be a minimum of 10 feet wide and 30 feet long with a minimum 25 foot taper on each end.

Section 503.3 Marking: When required by the fire code official, approved signs or other approved notices shall be provided for all public and private fire apparatus access roads to identify such roads or prohibit obstruction thereof. Signs or notices shall be maintained in a clean and legible condition at all times and shall be replaced or repaired when necessary to provide adequate visibility. All new public roads, all private roads within major subdivisions and all private roads serving four or more parcels shall be named. Road name signs shall comply with City of Encinitas standards.

Section 503.4.1 ROADWAY DESIGN FEATURES
Roadway design features (speed bumps, speed humps, speed control dips, etc.) which may interfere with emergency apparatus responses shall not be installed on any fire access roadways, unless they meet design criteria approved by the Chief.

(A)Sec. 503.6 Security Gates. No person shall install a security gate or security device across a fire access roadway without the fire code official's approval. All gates providing access from a road to a driveway shall be located a minimum of 30 feet from the nearest edge of the roadway and shall be at least two feet wider than the width of the traffic lane(s) serving the gate. An automatic gate across a fire access roadway or driveway shall be equipped with an approved emergency key-operated switch overriding all command functions and opening the gate. A gate accessing more than four residences or residential lots or a gate accessing hazardous institutional, educational or assembly occupancy group structure, shall also be equipped with an approved emergency traffic control-activating strobe light sensor or other device approved by the fire code official, which will activate the gate on the approach of emergency apparatus with a battery back-up or manual mechanical disconnect in case of power failure. An automatic gate shall meet fire department policies deemed necessary by the fire code official for rapid, reliable access. An automatic gate serving more than one dwelling or residential lot in existence at the time of adoption of this chapter is required to install an approved emergency key-operated switch or other mechanism approved by the fire code official, at an approved location, which overrides all command functions and opens the gate. A property owner shall comply with this requirement within 90 days of receiving written notice to comply. Where this section requires an approved key-operated switch, it may be dual-keyed or equipped with dual switches provided to facilitate access by law enforcement personnel. Electric gate openers, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

Chapter 5 Fire Service Features - Section 508 is hereby revised in Building/Fire Code portion of the California Building Standards Code to read as follows:

Section 508.2.2 Water Tanks Table 508.2.2A - Water storage tanks, when permitted by the Chief, shall comply with Table No. 508.2.2A

WATER STORAGE TANKS

Table No. 508.2.2A

TABLE NO. 508.2.2A			
I. Building Square Feet	Gallons Per Minute Water Flow	Capacity Gallons	Duration Minutes
II. Up to 1,500 Over 1,500	 250 250	 5,000 10,000	 20 40
When exposure distance is one hundred feet (100') or less from adjacent property, -Or where additional hazards or higher fire flow exists, the required water storage may be modified by the fire code official.			

1. Tank elevation shall be equal to or higher than the fire department connection on the premises. Regardless of domestic use, all tanks shall be equipped with a device that will ensure that the tank contains the designated amount of water for fire flow duration as determined by the fire department. Tank size may be increased to serve multiple structures on a single parcel.

2. Supply outlet shall be at least 4 inches in diameter from the base of the tank to the point of outlet at the fire department connection. The fire department connection shall provide an approved means of controlling water flow.

3. The outlet shall be located along an access roadway and shall not be closer than 50 feet or further than 150 feet from the structure.

4. All exposed tank supply pipes shall be of an alloy or other material listed for above ground use. Adequate support shall be provided.

In zones other than industrial, commercial and multi-family, fire hydrants shall be installed in accordance with Table No. 507.5.1.1A.

Table No. 507.5.1.1A

TABLE 507.5.1.1A	
Parcels ½ acre and larger:	Every 500 feet to the structure
1. Parcels less than ½ acre:	Every 350 feet

Section 507.5.1.1.2
In multi-family zones and in commercial and industrial zones, fire hydrants shall be installed at intersections, at the beginning radius of cul-de-sacs, and every 300 feet of fire access roadways, regardless of parcel size.

Chapter 9 Fire Sprinklers systems in the Building/Fire Code portion of the California Building Standards Code ~~to~~ shall read as follows:

Section 902.1 LIFE SAFETY SPRINKLER SYSTEM shall meet National Fire Protection Association Standards 13-D and 13-R latest addition, and City of Encinitas installation policies as appropriate.

Section 903.2 Where required. Approved automatic sprinkler system in new building and structures shall be provided in the locations described in ~~this~~ sections 903.2.1 through 903.2.2, and may be required in additions and remodels of existing structures as described in section 903.2.1.1 and 903.2.1.2..

Section 903.2.1. Group R. An automatic sprinkler system installed in accordance with section 903.3 shall be provided throughout all buildings with a group R fire area. This includes single family dwellings, multi-family dwellings and all residential care facilities regardless of occupant load.

Section 903.2.1.1 Additions. An automatic sprinkler system installed in accordance with 903.3 may be required to be installed throughout structures when the addition is more than 50% of the existing building or when the altered building will exceed a fire flow of 1,500 gallons per minute as calculated per section 507.3. The fire code official may require an automatic sprinkler system be installed in buildings where no water main exists to provide the required fire flow or where a special hazard exists such as: poor access roads, grade, bluffs and canyon rims, hazardous brush and response times greater than 5 minutes by a fire department.

Section 903.2.1.2 Remodels or reconstruction. An automatic sprinkler system installed in accordance with section 903.3 may be required if the scope of work includes significant modification to the interior of roof of the building, and the cost of the installation does not exceed 15 percent of the construction costs of the remodel.

903.2.2 Commercial and Group U. An automatic sprinkler system installed in accordance with section 903.3 shall be required in buildings and structures where the required fire flow exceeds 1500 gallons per minute as calculated by section 507.3., or when the square footage of a new commercial building exceeds 5000 square feet. The fire code official may also require an automatic sprinkler system to be installed in buildings where no water main exists to provide the required fire flow or where a special hazard exists such as: poor access roads, grade, bluffs and canyon rims, hazardous brush..

903.2.3 Exception: Agricultural buildings constructed of wood or metal frame, over which fabric or similar material is stretched, which are specifically used as green houses are exempt from the automatic sprinkler requirements unless physically connected to other structures.

Section 903.3 Standpipes. A Class I standpipe with 2.5 inch hose valves shall be provided for all commercial buildings three levels or more in height, regardless of occupancy type. Hose valves shall be located in each stair enclosure and on each floor level, including the roof. For single story buildings or parking structures with large floor areas, class I standpipes may be required.

Section 3308.2 Fireworks - shall not be sold, manufactured, disposed or discharged within the jurisdictional boundaries of the City of Encinitas, except when a permit is issued for public display, theatrical purposes and/or group entertainment by the fire department to a California State Fire Marshal licensed pyro-technician and the minimum requirements of Title-19, California Code of Regulations, Chapter-6, fireworks are met. The San Diego County Regulatory Ordinance,Title-3, Division-2, Chapter 1, section 32.101 through 32.108 may be used as a guide when enforcing these requirements.

Section 3308.4 Fireworks Penalty - Any person violating any provisions or failing to comply with this Chapter or the requirements of Title-19 California Code of Regulations, chapter 6, and/or San Diego County Regulatory Ordinance,Title-3, Division-2, Chapter 1, section 32.101 through 32.108, shall be guilty of a misdemeanor and upon conviction thereof, shall be punishable by a fine not to exceed One Thousand dollars ($1000) or by imprisonment in the County jail for a period of not more than one year or by both such fine and imprisonment.

Chapter 34 Flammable and Combustible Liquids - Section 3405.2.4 of the Building/Fire Code portion of the California Building Standards Code ~~to~~ shall read as follows: Section 3405.2.4 Class I, II and III liquids Exception: 4 is deleted.

Appendix Chapter 1 Administration is hereby revised in the Building/Fire Code portion of the California Building Standards Code to read as follows:

Section 101.5 City of Encinitas Validity
The City Council of the City of Encinitas hereby declares that should any section, paragraph, sentence or word of this ordinance or of the code hereby adopted be declared for any reason to be invalid, it is the intent of the City Council of the City of Encinitas that it would have passed all other portions of this ordinance independently of the elimination here from of any such portion as may be declared invalid.

Appendix Chapter 1 - Section 102.~~10~~ 13 Repeal of Conflicting Ordinances, Resolutions or motions is hereby revised in the Building/Fire Code portion of the California Building Standards Code to read as follows:

Section 102.~~10~~ 13 REPEAL OF CONFLICTING ORDINANCES, RESOLUTIONS OR MOTIONS All former ordinances, resolutions or motions, or parts thereof, including 2007-12, 2008-06 and 2008-05, which conflict~~ing~~ or are inconsistent with the provisions of this Ordinance or of the Code or standards hereby adopted are hereby repealed.

Section 3

That the geographic limits referred to in certain sections of the ~~2007~~ 2010 California Fire Code is hereby established as follows:

Chapter 34 Flammable and Combustible Liquids in the Building/Fire Code portion of the California Building Standards Code ~~to~~ shall read as follows:

Section 3404.2.9.6.1 City of Encinitas in which the storage of Class I and Class II liquids in above-ground tanks outside of buildings is prohibited): The limits referred to in Section 3404.2.9.6.1 and 3406.2.4.4 of the 2010 California Fire Code and the 2009 International Fire Code in which storage of flammable or combustible liquids in outside aboveground tanks is prohibited are hereby established as the jurisdictional limits of the City of Encinitas.

EXCEPTIONS:

1. 2000 gallons maximum temporary (six months maximum) above ground tanks meeting UL 2085 for private use on farms, agricultural and rural property, remote construction sites, earth moving projects, gravel pits or borrow pits. Such tanks shall be specially designed, approved and listed, and have features incorporated into their design which mitigates concerns for exposure to heat (two-hour fire resistance), ignition sources and mechanical damage. A fire department permit will be required.

2. Crankcase draining may be stored in specially constructed above ground storage tanks, approved by the Chief, with a maximum capacity of 550 gallons. Such tanks may be located within a building when the Chief deems appropriate, and the container meets the following: specially designed, approved and listed containers which have features incorporated into their design which mitigates concerns for exposure to heat, ignition sources and mechanical damage. Containers must be installed and used in accordance with their listing, and provisions must be made for leak and spill containment. In no case shall such storage be permitted in residential or institutional property. All installations require a fire department permit.

3. With the Chief's approval, Class I and II liquids may be stored aboveground tanks inside or outside of buildings in specially designed, approved and listed containers which have features incorporated into their design which mitigates concerns for exposure to heat, ignition sources and mechanical damage. Class I liquids will be limited to 550 gallons and class II liquids will be limited to 1100 gallons.

Containers must be installed and used in accordance with their listing, and provisions must be made for leak and spill containment. The Chief may disapprove the installation of such containers when in his opinion their use presents a risk to life or property.

4. With the Chief's approval, temporary storage of a maximum 10,000 gallons of Class II liquids may be permitted for a period not to exceed ninety (90) days at remote construction sites, earth moving projects, gravel pits or borrow pits, consistent with 3404 and 3406.

Section 3406.2.4.4 The geographic limits in which the storage of Class I and Class II liquids in above-ground tanks is prohibited in residential areas within the City of Encinitas.

Section 3406.4 The geographic limits in which bulk plants and terminals of flammable and combustible liquids are received are prohibited for the protection of heavily populated and congested areas and is hereby established as jurisdiction limits of the City of Encinitas.

Section 3804.2 The geographic limits in which the bulk storage of liquefied petroleum gas is prohibited for the protection of heavily populated and congested areas is hereby established as jurisdiction limits of the City of Encinitas except for areas zoned by the County of San Diego for mixed, general or high impact industrial uses.

FINDINGS

FOR REVISION OF THE CITY OF ENCINITAS
AMENDMENTS TO THE 2010 CALIFORNIA FIRE CODE OF THE CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 9

As required by Health and Safety Code section 17958 the City of Encinitas does herewith make express findings that amendments to the California Building Standards Code are necessary for the protection of the public health, safety and welfare due certain climatic, topographic or geological features existing in the City of Encinitas.

The following matrix lists the City of Encinitas amendments and the corresponding express findings. Minor editorial changes or typographical corrections to the Fire Code are not shown in these findings. The full texts of the proposed City of Encinitas amendments are shown in City of Encinitas Fire Code.

MATRIX OF FINDINGS		
2010 California Fire Code Amendments		
Chapters or Sections	***PAGE NUMBER***	***FINDING NUMBER(S)***
Chapter 2 Definitions		All
Chapter 3 General Precautions Against fire		
Section 319.1 and 319.2 Mid-Rise Buildings		A,D,E,F
Chapter 5 Fire Service Features		A,B,C & D
Section 503.1.2 Secondary Access		A, B,C,D & E
Section 503.2.1 Dimensions		B,C & D
Section 503.2.3 Surface		B,C,& D
Section 503.2.7 Grade Section 503.2.8 Roadway Turnouts		B, C A,B,C,D,E,F
Section 503.4.1 Roadway Design Features		A, B,C & D
Section 503.6. Security Gates		B, C

Section 508.2.2 Water Storage Tanks		B, C & E
Chapters & Sections	***PAGE NUMBER***	***FINDING NUMBER(S)***
Section 507.5.1.1A Required Installation		All
Chapter 9 Fire Protection Systems		B,C,D & E
Section 902.1 Life Safety Sprinkler System		B,C, & E
Section 903.2 Where Required		All
Section 903.2.1 Exceptions Section 903.2.1.1 Additions Section 903.2.1.2 Remodels or reconstruction Section 903.3.3 Commercial and Group U Section 903.2.3 Exception for agricultural building Section 903.3 Standpipes		All All All All All All
		All
Chapter 33 Fireworks, Section 3308.1 Fireworks –use, display, disposal, seizure		B, C
Chapter 34 Flammable Combustible Liquids		

Section 3405.2.4 Class I, II and III Liquids		All
Appendix Chapter 1 Administration		
Section 101.5 Validity		All
Section 102.10. 13 Repeal Conflicting Ordinance		All
Chapters & Sections	***Page Numbers***	***Finding Numbers***
Section 3		
Section 3404.2.9. 6 .1 Class I & Class II Flammable Liquids		All
Section 3406.2.4.4 Class I & Class II Storage in residential		All
		All
Appendix "B" Fire –Flow Requirements for Buildings		All
	-	
Appendix "H" Hazardous Materials Management Plans (No Amendments to appendix)	-	All

Findings for the Fire Code

The City Council hereby makes the following findings concerning the special circumstances and the climatic, topographic and geological conditions that: (a) exist in the City of Encinitas; (b) increase the exposure of the public to the dangers of fire; (c) could severely restrict the response of emergency services to fire dangers; and (d) can be mitigated by amendments to the international fire and construction codes:

Finding A

The City of Encinitas is bisected by a major transportation corridor (Interstate 5) which traverses in a north/south direction. Interstate 5 is used to transport hazardous materials and is designated by the State of California as an approved route for transporting highly toxic and radioactive materials.

The City of Encinitas is bisected by a railroad line running north/south. Hazardous materials are transported on the railroad.

Underground pipes run parallel to the railroad line and carry natural gas under high pressure. Underground pipes run in a north/south direction in the eastern portion of the City and carry liquid petroleum under high pressure.

The transport, through the City, of hazardous, toxic and radioactive materials, as well as natural gas and liquid petroleum, on a regular basis, increases the threat of fire ignition and spread. This adds to the fire danger posed by the City's climatic, topographic and geological conditions.

Finding B

The City of Encinitas's topography is characterized by many large hillsides. The City's climate promotes the heavy growth of natural vegetation that covers the hillsides and is highly flammable, especially in the dry season.
There are numerous areas of wildland-urban interface where structures, especially residences, are in close proximity to that natural vegetation.

The City's climate is characterized by Santa Ana conditions involving dry gusty winds. In summer and fall, the typical weather is hot and dry. In combination, these climatic conditions create an extreme fire danger to the community.

Seasonal winds also have the potential for impeding emergency vehicle access by toppling trees (especially eucalyptus which is a species that is prevalent in the City and susceptible to being felled by winds).

As a result of the above conditions, the risk of fire ignition is greater. Also, once a fire is ignited, it is more likely that embers will be blown into the air, increasing the spread of the fire into the community. Therefore, land use projects need to be developed to provide a greater ability to avoid fire ignition, suppress fires, and facilitate access of emergency vehicles.

Finding C

The City of Encinitas is situated on the west slope of the coastal foothills that contain drainages, including Escondido Creek, which contribute to flooding within the community.

Because flooding conditions can impede fire service vehicles reaching the site of a fire, land use projects need to be developed to provide a greater ability to avoid fire ignition, suppress fires, and facilitate access of emergency vehicles.

Finding D

The City of Encinitas is situated near the Rose Canyon Fault, the Elsinore Fault, and the Agua Caliente Fault.
A cluster of faults known as the "South Coast Offshore Zone of Deformation" is located off the City's coast. These geologic conditions are capable of generating earthquakes of significant magnitude at any time.

An earthquake may: (1) cause fires; (2) impede emergency vehicles responding to fires; and (3) interrupt the City's water supply which is needed to fight fires.

Because the community is subject to damage from earthquakes, land use projects need to be developed to provide a greater ability to avoid fire ignition, suppress fires, and facilitate access of emergency vehicles.

Finding E

The City of Encinitas and Southern California are semi-arid regions and experience water shortages from time to time. Those shortages can have a severely adverse effect on water availability for fire fighting.
Fires starting in sprinkled buildings are typically controlled by one to three sprinkler heads, flowing as little as 13 gallons per minute.

Hose streams used by engine companies on well established structure fires operate at approximately 250 gallons per minute each, and the estimated water needed for a typical residential fire is 1,250 to 1,500 gallons per minute, according to the Insurance Service Office and the Uniform Fire Code. The water estimate for a commercial building is typically greater than that of a residential structure.

Under circumstances such as; lack of water, infrastructure, earthquakes, multiple fires and wildland fires within a community, the limited water demand needs of residential fire sprinklers would control and extinguish many fires before they spread from building to wildland, or building to building. In such a disaster, water demands needed for conflagration firefighting probably would not be available.

Finding F

Due to the sloping topography and coastal foothills in the City of Encinitas, the potential exists that new and future development will result in taller buildings on smaller parcels. Defining mid-rise buildings from 75 feet in height to 55 feet modifies the application of special provisions for these buildings to all occupancies. Because of the need to mitigate the potential danger of mid-rise this change is necessary.

In addition, the limitations of available firefighting equipment, limited availability of human resources in local fire departments, and the necessity to climb vertically up flights of stairs, greatly impacting the response time to reach an incident scene, it is necessary to define the height of mid rise buildings. The reduced height and built in protection will mitigate extended fire department response time and keep incidents manageable.

Finding G

Based upon the circumstances previously described, the protection of persons and property requires the City to adopt standards that are more stringent than those set forth in: (1) the State Building Standards Code Sections, 503, , 508, 902, 903, 3045, 3308, 3406, B, , H and Section 3 of the International Fire Code.